

Work Order ID 104683

July-12-13 2:27:40 PM

104683

U/R

Page 1

Item ID: 646.3513

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: STRUT

Start Date: 7/12/13

Start Qty: 20.00

20

Cust Item ID:

Required Date: 7/24/13

Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan: W

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

646.3500

N/C (ECN) U/R

- CHG mat'l to SS h

0.00

110

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut 646.3500 plate 2.00"X 2.00" as per Dwg

Dwg Rev: N/C

Prog Rev: N/C

2-Deburr if necessary

20 0

Ac
13-07-13

110

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

20 0

Ac
13-07-13

7/13

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20

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Reference:

Run Start

NR1

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

Quality Control

140

0.00

140

Small Fab

Memo

0.00

Small Fab

1- Fabricate tube as per dwg

150

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.00

Quality Control

20

20

17 13-7-24

20

13-07-24

DAS
09
-09

20

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Page 4

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N9000040100

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20

Cust Item ID:

Required Date: 7/24/13 Req'd Qty: 20.00

20

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: Date: Tooling: Date:

Stop *NR2*

QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190 Outsource process - Anodize per QSI017 4.1.10.1 0.00

190

Outsource4

Outsource process - Anodize

Memo

Issue P/O:

Anodize as per dwg

0.00

200

Receive & Inspect for Damage & Mat'l Certs

0.00

200

Packaging

Packaging

Memo

0.00

210

QC5- Inspect part completeness to step on W/O

0.00

210

QC

Quality Control

Memo

0.00

DAS
27
28

13.8.23

V/A

20x

SD
13-8-23

20

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July-12-13 2:27:40 PM

Item ID: 646.3513

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: STRUT

Start Date: 7/12/13 Start Qty: 20.00

20

Cust Item ID:

Required Date: 7/24/13 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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220

0.00

220

SprayPaint

Memo

0.00

Spray Painting

Prime as per dwg (see note 3)

Batch: M125452

CL 13/07/24

230

0.00

230

QC

QC 14- Inspect Spray Paint

DAS

27

9-89

20

Quality Control

Memo

0.00

13825

240

0.00

240

Packaging

Memo

ST 523A

0.00

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV

20x M. D. 13-08-27

POSITIVE RECALL
EFFECTIVE 308.17 AUTH h
RELEASED 5 DATE 13/08/2013

100

1. 2. 3.

—

Work Order ID 104683

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July-12-13 2:27:40 PM

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Accept

N900040100

Setup Start

NS1

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Stop

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Start Qty: 20.00

20

Cust Item ID:

Required Date: 7/24/13

Req'd Qty: 20.00

20

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

250

QC21- Final Inspection - Work Order Release

0.00

250

QC

Memo

0.00

Quality Control

13/8/297g

13-08-28

Picklist Print

July-12-13 2:27:39 PM

Page 1

Work Order ID: 104683
Parent Item: 646.3513
Parent Item Name: STRUT

Start Date: 7/12/13
Start Qty: 20.00

Required Date: 7/24/13
Required Qty: 20.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S12GA 304/316 0.100" Sheet		Purchased	No				sf	79.4000		0.5894737			
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>			113077		0.59	
				MAT019		79.4							
				113062		79.4							
M304TR0.500W.049 304 RD Tube .500 x .049W		Purchased	No				f	210.4197		21.052632			
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>			13-7-23			
				GA		43.66							
				120633		43.66							
				MAT017		166.759716							
				119087		0.000016							
				123449		86.7597							
				125513		80				201			

David Duval

From: Pablo Bravo
Sent: Wednesday, April 24, 2013 2:23 PM
To: Jean-Luc Menard
Cc: David Duval; Linda Lacelle
Subject: RE: 646.3510/3511/3512/3513 STRUT ASSY

JL,
This should be okay.

Pablo

From: Jean-Luc Menard
Sent: Wednesday, April 24, 2013 9:15 AM
To: Pablo Bravo
Cc: David Duval; Linda Lacelle
Subject: Fwd: 646.3510/3511/3512/3513 STRUT ASSY

Any news on this?

Sent from my iPhone

Begin forwarded message:

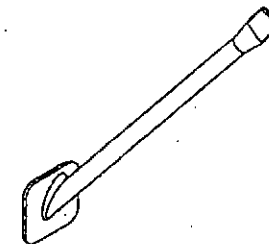
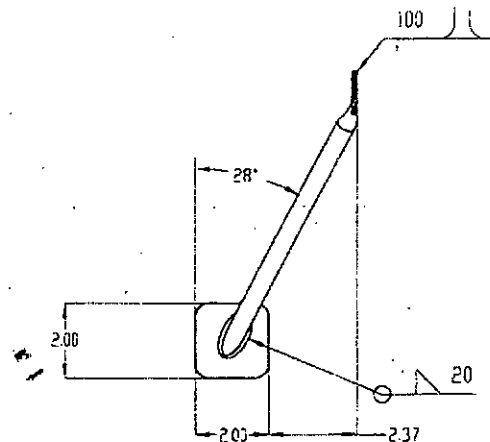
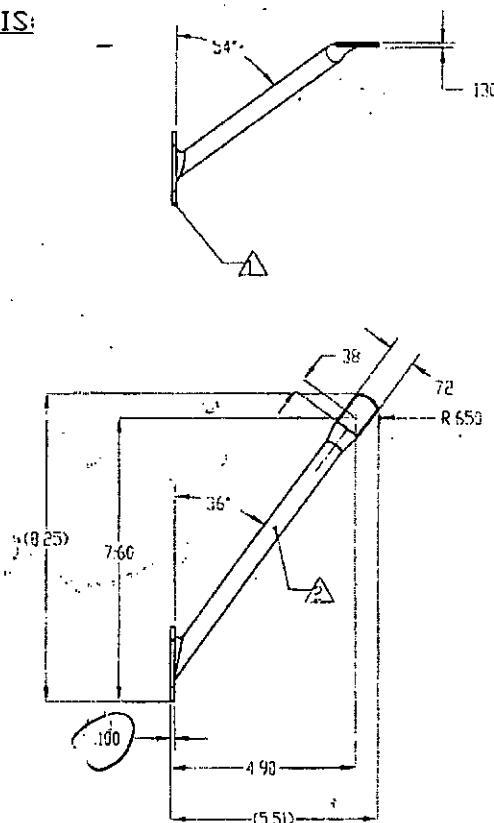
From: Jean-Luc Menard <jmenard@dartaero.com>
Date: 22 April, 2013 10:27:05 AM EDT
To: Pablo Bravo <pbravo@dartaero.com>
Cc: David Duval <dduval@dartaero.com>, Linda Lacelle <llacelle@dartaero.com>
Subject: 646.3510/3511/3512/3513 STRUT ASSY

Hi Pablo,
We have started manufacturing the struts and have run into some problems with cracking when punching/bending the end of the struts.
Would going to 304 ss tubing with .049" wall be an acceptable deviation?
This would include changing the bottom plate that gets welded on also to SS.
Let me know asap so I can attach to the w/o and if acceptable I will issue a ECR.

THX
JL

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTIC. NO. 02440		SHEET 1 OF 1	
	DWG NO. 646.3500	REV. NC	PREPARED BY S. HUFF	DATE 06/08/09
	DWG TITLE: STRUT		EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
	APPROVED BY: ENGR <i>[Signature]</i>	MFG	QC	EFF: CURRENT ORDER AND STOCK
TRANSACTION CODES (IC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED GEOMETRY TO ACCOMMODATE NEW EXISTING AIRCRAFT PROVISIONS			

SHEET 2 IS:



646.3512 SHOWN
646.3513 OPPOSITE

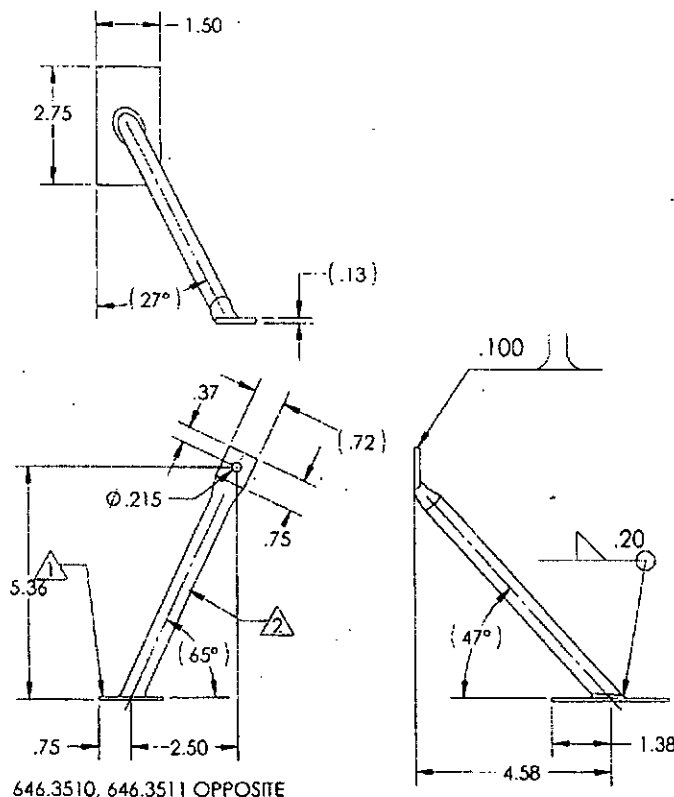
SEARCHED
INDEXED
SERIALIZED
FILED
JUN 10 2009
FBI - MEMPHIS
100-115-1123
15-24-18

W/D 10/16/03

DOCUMENTS EFFECTED:	<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> FMS <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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NOTES:

1. MATERIAL: 6061-T6 ALUMINUM IAW AMS-QQ-A-250/11;
.062" THK.
2. MATERIAL: 6061-T6 ALUMINUM IAW AMS-WW-T-700/6
.500" OD; .062" WALL THK
3. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2
COLOR BLACK;
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME IAW MIL-P-23377J TYPE I CLASS N
4. DEBURR AND BREAK ALL SHARP EDGES
5. WELDS IAW MIL-STD-2219.
TIG WELD WITH FILLER ROD



646.3510 SHOWN
646.3511 OPPOSITE

UNINCORPORATED ECN(S)

02197, 02440

[illegible]

5



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62583

Date: 22-Aug-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To


DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 20 PCS 646.3513 PRIME MIL-P-23377J TYPE I CLASS N 52 PCS 647.9413 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N Job: 20130532 PO: 20678	Rev:	Line:
<p align="center">Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE : <u>22/8/13</u></p> <p>CERTIFIED SIGNATURE : <u></u></p> <p>RECEIVER SIGNATURE : _____</p>			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO20678

Purchase Order Date 7/24/2013

PO Print Date 8/23/2013

Page Number 1 of 4

Order From :

VC-ATG001

Ship To : DART AEROSPACE LTD

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

613-446-4544

Ship To Contact

Ship To Phone

Ship Via:

Yours ppd

Ship Acct:

Buyer

Brigitte Golden

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

REVISED
\$

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extend Pri
4	104683 CARDINAL 4860-50 PRETREATMENT PRIMER IAW MIL-P-23377J TYPE I CLASS N B104683	646.3513 Strut	8/2/2013 Yes 8/2/2013		20.00	\$16.34	\$326.
Line Total:							\$326.
5	102933 Hard anodize IAW MIL A 8625 TYPE III CLASS 2 COLOR BLACK CARDINAL 4860-50 PRETREATMENT PRIMER IAW MIL-P-23377J TYPE I CLASS N	646.3810 BRACKET	8/2/2013 Yes 8/2/2013		21.00	\$6.55	\$137.
Line Total:							\$137.
6	104680 SAME AS ABOVE	646.3717 DOUBLER	8/2/2013 Yes 8/2/2013		6.00	\$8.48	\$50.

SP 13-8-23

Note:

8/23/2013

